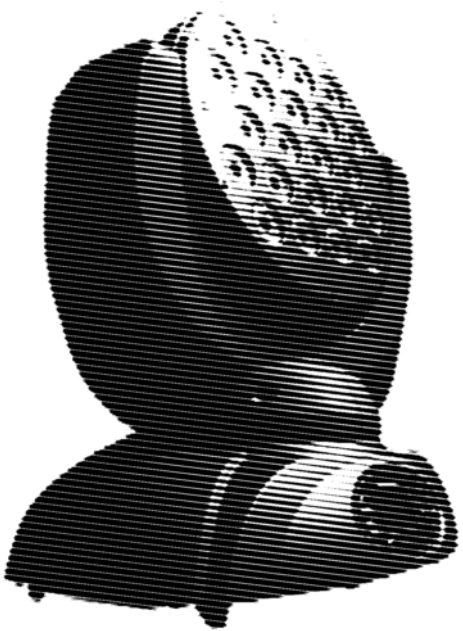

STAIRVILLE

novaWASH Quad LED

moving head

th•mann
MUSIC IS OUR PASSION

user manual

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1 General notes

This user manual contains important information on safe operation of the device. Read and follow all safety notes and all instructions. Save this manual for future reference. Make sure that it is available to all persons using this device. If you sell the device to other users, be sure that they also receive this manual.

Our products are subject to a process of continuous development. We therefore reserve the right to make changes without notice.

Symbols and signal words

This section provides an overview of the symbols and signal words used in this user manual.

Signal word	Meaning
DANGER!	This combination of symbol and signal word indicates an immediate dangerous situation that will result in death or serious injury if it is not avoided.
WARNING!	This combination of symbol and signal word indicates a possible dangerous situation that can result in death or serious injury if it is not avoided.
NOTICE!	This combination of symbol and signal word indicates a possible dangerous situation that can result in material and environmental damage if it is not avoided.

Warning signs	Type of danger
	Warning – high-voltage.
	Warning – hot surface.

Warning signs	Type of danger
	Warning – suspended load.
	Warning – danger zone.

2 Safety instructions

Intended use

Use the device only as described in this user manual. Any other use or use under other operating conditions is considered to be improper and may result in personal injury or property damage. No liability will be assumed for damages resulting from improper use.

This device may be used only by persons with sufficient physical, sensorial, and intellectual abilities and having corresponding knowledge and experience. Other persons may use this device only if they are supervised or instructed by a person who is responsible for their safety.

Safety

DANGER!

Danger for children

Ensure that plastic bags, packaging, etc. are disposed of properly and are not within reach of babies and young children. Choking hazard!

Ensure that children do not detach any small parts (e.g. knobs or the like) from the unit. They could swallow the pieces and choke!

Never let children unattended use electrical devices.

DANGER!

Electric shock caused by high voltages inside

Within the device there are areas where high voltages may be present. Never remove any covers.

There are no user-serviceable parts inside.

DANGER!

Electric shock caused by short-circuit

Always use proper ready-made insulated mains cabling (power cord) with a protective contact plug. Do not modify the mains cable or the plug. Failure to do so could result in electric shock/death or fire. If in doubt, seek advice from a registered electrician.

WARNING!

Eye damage caused by high light intensity

Never look directly into the light source.

WARNING!

Risk of epileptic shock

Strobe lighting can trigger seizures in photosensitive epilepsy. Sensitive persons should avoid looking at strobe lights.

WARNING!

Risk of burns

The surface of the device can become very hot during operation.

Do not touch the device with bare hands during operation, and after switching off wait for at least 15 minutes.

NOTICE!

Risk of fire

Do not cover the device nor any ventilation slots. Do not place the device near any direct heat source. Keep the device away from naked flames.

NOTICE!

Operating conditions

This device has been designed for indoor use only. To prevent damage, never expose the device to any liquid or moisture. Avoid direct sunlight, heavy dirt, and strong vibrations.

NOTICE!

Power supply

Before connecting the device, ensure that the input voltage (AC outlet) matches the voltage rating of the device and that the AC outlet is protected by a residual current circuit breaker. Failure to do so could result in damage to the device and possibly injure the user.

Unplug the device before electrical storms occur and when it is unused for long periods of time to reduce the risk of electric shock or fire.

3 How to set the unit

Unpack and carefully check that there is no transportation damage before using the unit. Keep the equipment packaging. To fully protect the device against vibration, dust and moisture during transportation or storage use the original packaging or your own packaging material suitable for transport or storage, respectively.

Establish all connections as long as the unit is switched off. Use the shortest possible high-quality cables for all connections.

WARNING!

Risk of injury caused by falling objects

Make sure that the installation complies with the standards and rules that apply in your country. Always secure the device with a secondary safety attachment, such as a safety cable or a safety chain.

NOTICE!

Risk of overheating

Always ensure sufficient ventilation.

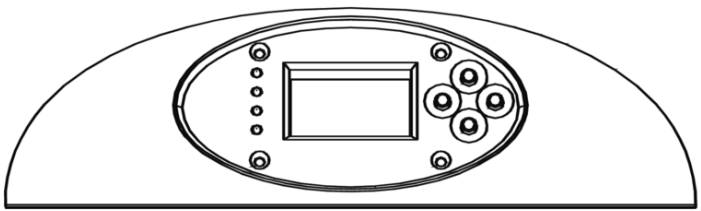
The ambient temperature must always be below 40 °C (104 °F).

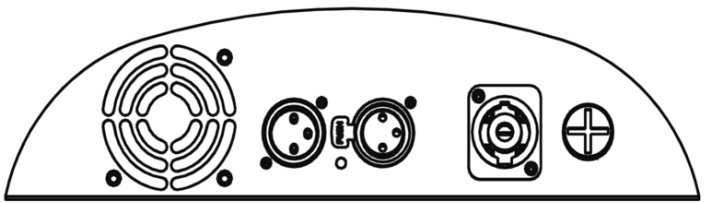
NOTICE!

Use of stands

When mounting the device onto a stand, ensure that the stand is in a safe and stable position and that the weight of the device does not exceed the maximum permissible load capacity of the stand.

3.1 Control panel





Display Shows the various menus and the selected functions.

LEDs

DMX	On	DMX input present
MASTER	On	Master mode
SLAVE	On	Slave Mode
POWER	On	Power input present

Buttons

MENU	To select the programming functions
DOWN	To go backward in the selected functions
UP	To go forward in the selected functions
ENTER	To confirm the selected functions

Fuse For over-current protection.

Mains input Connect to supply mains power.

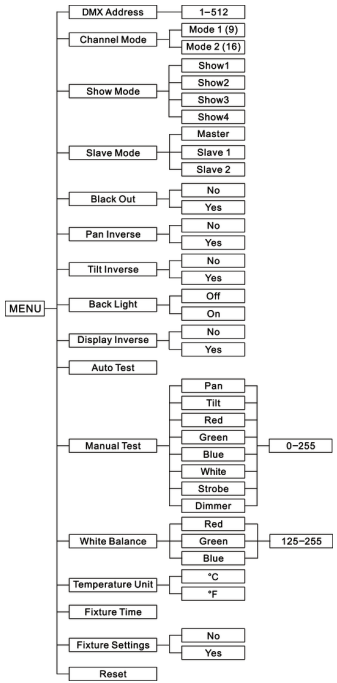
DMX input/output For DMX512 link, use 3/5-pin XLR plug cable to link the unit together.

3.2 Main functions

To select any of the given functions, press the *'MENU'* button up to when the required one is showing up on the display. Select the function by the *'ENTER'* button and the display will blink. Use the *'DOWN'* and *'UP'* button to change the mode. Once the required mode has been selected, press the *'ENTER'* button to store. To return to the main functions without any change, press the *'MENU'* button or wait for one minute.

Hold the *'MENU'* button to quit the menu mode. The unit will run the built-in program you selected.

The main functions are shown below:


MENU
DMX Address
1–512
Channel Mode
Mode 1 (9)
Mode 2 (16)
Show Mode
Show1
Show2
Show3
Show4
Slave Mode
Master
Slave 1
Slave 2
Black Out
No
Yes
Pan Inverse
No
Yes
Tilt Inverse
No
Yes
Back Light
Off
On
Display Inverse
No
Yes
Auto Test
Manual Test
Pan
Tilt
Red
Green
Blue
White
Strobe
Dimmer
0–255
White Balance
Red
Green
Blue
125–255
Temperature Unit
°C
°F
Fixture Time
Fixture Settings
No
Yes
Reset

DMX Address

Press the *'MENU'* button up to when *'DMX Address'* is showing up on the display. Press the *'ENTER'* button and the display will blink. Use the *'DOWN'* and *'UP'* buttons to change the DMX512 address. Once the address has been selected, press the *'ENTER'* button to store. To return to the main functions without any change, press the *'MENU'* button or wait for one minute.

Channel Mode

Press the *'MENU'* button up to when *'Channel Mode'* is showing up on the display. Press the *'ENTER'* button and the display will blink. Use the *'DOWN'* and *'UP'* buttons to select *'Mode 1 (9)'* or *'Mode 2 (16)'*. Once selected, press the *'ENTER'* button to store. To return to the main functions without any change, press the *'MENU'* button or wait for one minute.

Show Mode

Press the *'MENU'* button up to when *'Show Mode'* is showing up on the display. Press the *'ENTER'* button and the display will blink. Use the *'DOWN'* and *'UP'* buttons to select *'Show 1'*, *'Show 2'*, *'Show 3'* or *'Show 4'*. Once selected, press the *'ENTER'* button to store. To return to the main functions without any change, press the *'MENU'* button or wait for one minute.

Slave Mode

Press the *'MENU'* button up to when *'Slave Mode'* is showing up on the display. Press the *'ENTER'* button and the display will blink. Use the *'DOWN'* and *'UP'* buttons to select the *'Master'*, *'Slave 1'* or *'Slave 2'* mode. Once selected, press the *'ENTER'* button to store. To return to the main functions without any change, press the *'MENU'* button or wait for one minute.

Black Out

Press the *'MENU'* button up to when *'Black Out'* is showing up on the display. Press the *'ENTER'* button and the display will blink. Use the *'DOWN'* and *'UP'* buttons to select either *'Yes'* (device switched to dark, blackout) or *'No'* (normal operation). Once selected, press the *'ENTER'* button to store. To return to the main functions without any change, press the *'MENU'* button or wait for one minute.

Pan Inverse

Press the *'MENU'* button up to when *'Pan Inverse'* is showing up on the display. Press the *'ENTER'* button and the display will blink. Use the *'DOWN'* and *'UP'* buttons to select the *'No'* (Normal) or *'Yes'* (Pan Inverse) mode. Once selected, press the *'ENTER'* button to store. To return to the main functions without any change, press the *'MENU'* button or wait for one minute.

Tilt Inverse

Press the *'MENU'* button up to when *'Tilt Inverse'* is showing up on the display. Press the *'ENTER'* button and the display will blink. Use the *'DOWN'* and *'UP'* buttons to select the *'No'* (Normal) or *'Yes'* (Tilt Inverse) mode. Once selected, press the *'ENTER'* button to store. To return to the main functions without any change, press the *'MENU'* button or wait for one minute.

Back Light

Press the *'MENU'* button up to when *'Back Light'* is showing up on the display. Press the *'ENTER'* button and the display will blink. Use the *'DOWN'* and *'UP'* buttons to select the *'On'* (back light on) or *'Off'* (back light off 1 minute after auto show) mode. Once selected, press the *'ENTER'* button to store. To return to the main functions without any change, press the *'MENU'* button or wait for one minute.

Display Inverse

Press the *'MENU'* button up to when *'Display Inverse'* is showing up on the display. Press the *'ENTER'* button and the display will blink. Use the *'DOWN'* and *'UP'* buttons to select the *'No'* (Normal) or *'Yes'* (Display Inverse) mode. Once selected, press the *'ENTER'* button to store. To return to the main functions without any change, press the *'MENU'* button or wait for one minute.

Auto Test

Press the *'MENU'* button up to when *'Auto Test'* is showing up on the display. Press the *'ENTER'* button and the display will show *'Test...'* and the unit will run a self-test.To return to the functions, press the *'MENU'* button.

Manual Test

Press the *'MENU'* button up to when *'Manual Test'* is showing up on the display. Press the *'ENTER'* button and *'PAN'* will blink. Use the *'UP '* and *'DOWN'* buttons to choose *'Tilt'*, *'Red'*, *'Green'*, *'Blue'*, *'White'*, *'Strobe'* or *'Dimmer'*. Press the *'ENTER'* button to enter, then press the *'UP'* or *'DOWN '* buttons to adjust the value and press the *'ENTER'* button to set the next option. To return to the main functions without any change, press the *'MENU'* button.

White Balance

Press the *'MENU'* button up to when *'White Balance'* is showing up on the display. Press the *'ENTER'* button and *'RED'* will blink. Use the *'UP '* and *'DOWN'* buttons to adjust the value. Press the *'ENTER'* button to store and *'Green'* will blink on the display. Press the *'UP'* and *'DOWN '* buttons to adjust the value. Press the *'ENTER'* button to store and *'Blue'* will blink on the display. Press the *'UP'* and *'DOWN '* buttons to adjust the value and press the *'ENTER'* button to store. To return to the main functions without any change, press the *'MENU'* button.

Temperature Unit

Press the *'MENU'* button up to when *'Temperature Unit'* is showing up on the display. Press the *'ENTER'* button and the display will blink. Use the *'DOWN'* and *'UP'* buttons to select *'℃'* or *'℉'*. Once selected, press the *'ENTER'* button to store. To return to the main functions without any change, press the *'MENU'* button or wait for one minute.

Fixture Time

Press the *'MENU'* button up to when *'Fixture Time'* is blinking on the display. Press the *'ENTER'* button and the display will show the number of working hours of the unit. To return to the functions press the *'MENU'* button.

Fixture Settings

Press the *'MENU'* button up to when *'Fixture Settings'* is showing up on the display. Press the *'ENTER'* button and the display will blink. Use the *'DOWN'* and *'UP'* buttons to select *'No'* or *'Yes'*. Use the option *'Yes'* to restore all parameters of the unit with the factory settings. Once selected, press the *'ENTER'* button to store. To return to the main functions without any change, press the *'MENU'* button or wait for one minute.

Reset

Press the *'MENU'* button up to when *'Reset'* is blinking on the display. Press the *'ENTER'* button and all motors will return to their home position. To return to the functions press the *'MENU'* button.

4 How to control the unit

You can operate the unit in three ways:

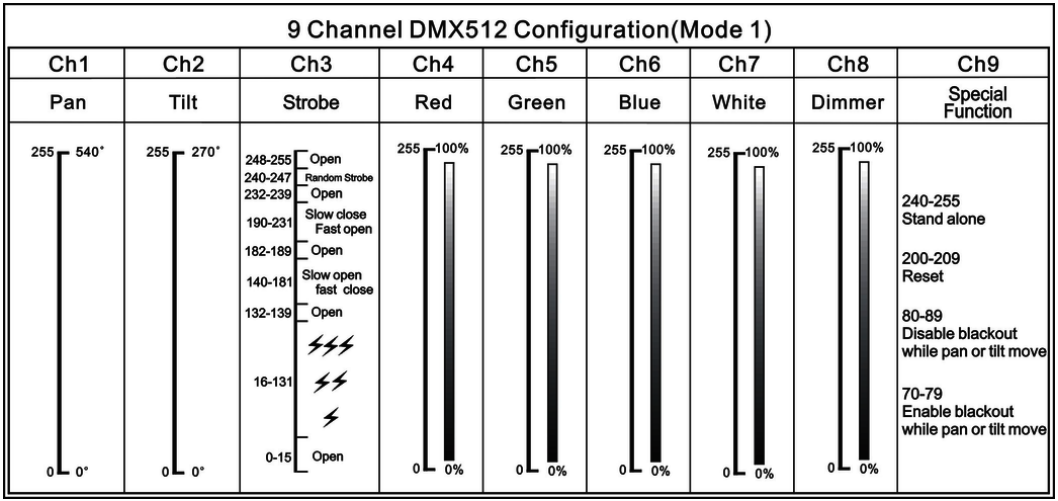
1. By the built-in preprogrammed function
2. By the universal DMX controller

4.1 DMX controller

Using the universal DMX controller to control the units, you have to set the DMX address from 1 to 512 channels so that the units can receive the DMX signal.

Press the *'MENU'* button up to when *'DMX Address'* is showing up on the display. Press the *'ENTER'* button and the display will blink. Use the *'DOWN'* and *'UP'* buttons to change the DMX512 address. Once the address has been selected, press and keep the *'ENTER'* button to store. To return to the functions without any change press the *'MENU'* button or wait for one minute.

4.2 DMX512 configuration

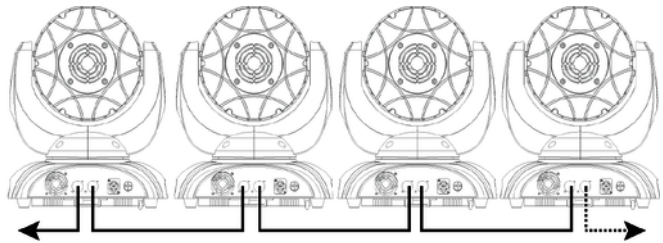


16 Channel DMX512 Configuration(Mode2)

Ch1	Ch2	Ch3	Ch4	Ch5	Ch6	Ch7	Ch8
Pan	Pan Fine	Tilt	Tilt Fine	Pan/Tilt Speed	Pan/Tilt Macro	Macro Speed	Special Function
255 540° 0 0°	255 0	255 270° 0 0°	255 0	255 Slow 0 Fast	236-255 Macro12 216-235 Macro11 196-215 Macro10 176-195 Macro 9 156-175 Macro 8 136-155 Macro 7 116-135 Macro 6 096-115 Macro 5 076-095 Macro 4 056-075 Macro 3 036-055 Macro 2 016-035 Macro 1 000-015 Stop	255 Slow 0 Fast	240-255 Stand alone 200-209 Reset 80-89 Disable blackout while pan or tilt move 70-79 Enable blackout while pan or tilt move

Ch9	Ch10	Ch11	Ch12	Ch13	Ch14	Ch15	Ch16
Dimmer	Strobe	Red	Green	Blue	White	Color	Fade Speed
255 100% 0 0%	248-255 Open 240-247 Random Strobe 232-239 Open 190-231 Slow close Fast open 182-189 Open 140-181 Slow open fast close 132-139 Open 16-131 0-15 Open	255 100% 0 0%	255 100% 0 0%	255 100% 0 0%	255 100% 0 0%	192-255 Color Fade 1-16 128-191 Color Macro 1-16 8-127 Color 1-32 0-7 Normal	255 Fast 0 Slow

4.3 DMX512 connection



Termination reduces signal errors and prevents signal transmission problems and interference. It is always advisable to insert a terminating resistor (120 ohm, 0.25 W) between pin 2 (DMX-) and pin 3 (DMX+) of the last unit.

1. At the last unit, the DMX cable has to be terminated with a terminator. Solder a 120-ohm 1/4W resistor between pin 2 (DMX-) and pin 3 (DMX+) into a 3-pin XLR-plug and plug it into the DMX output of the last unit.
2. Connect the unit together in a `daisy chain` by linking the XLR plug from the output of the unit to the input of the next unit. The cable cannot be branched or split to a `Y` cable. DMX512 is a high-speed signal. Inadequate or damaged cables, soldered joints or corroded connectors can easily distort the signal and shut down the system.
3. The DMX output and input connectors are pass-through to maintain the DMX circuit, when power is disconnected to the unit.
4. Each lighting unit needs to have an address set to receive the data sent by the controller. The address number is between 0 and 511 (usually 0 and 1 are equal to 1).
5. The end of the DMX512 system should be terminated to reduce signal errors.
6. 3-pin XLR connectors are more popular than 5 pin XLR.

   3-pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+)

   5 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+), Pin 4/5: Not used.

5 Troubleshooting

A few common problems that may occur during operation are shown in the following. Here are some suggestions for easy troubleshooting:

The unit does not work, no light and the fan does not work

1. Check the power connection and main fuse.
2. Measure the mains voltage on the main connector.
3. Check the power-on LED.

Not responding to DMX controller

1. The DMX LED should be on. If not, check the DMX connectors and cables to see if they are properly linked.
2. If the DMX LED is on and there is no response to the channel, check the address settings and DMX polarity.

3. If you have intermittent DMX signal problems, check the pins on connectors or on the PCB of the unit or of the previous one.
4. Try to use another DMX controller.
5. Check if the DMX cables run near or run alongside high-voltage cables that may cause damage or interference to DMX interface circuit.

One of the channels is not working well

- The cable connected to the PCB may be broken.

If the procedures recommended above do not succeed, please contact our Service Center. You can find the contact information at *www.thomann.de*.

6 Fixture cleaning

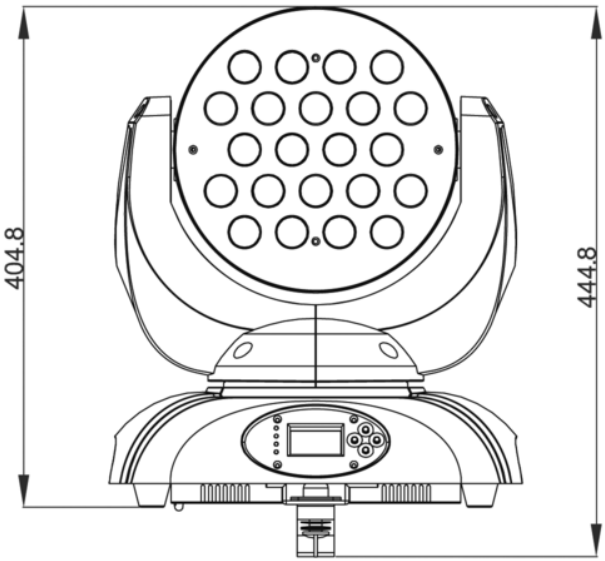
The cleaning of internal and external optical lenses and/or mirrors must be carried out periodically to optimize light output. The cleaning frequency depends on the environment in which the fixture operates: damp, smoky or particularly dirty surrounding can cause greater accumulation of dirt on the unit's optics.

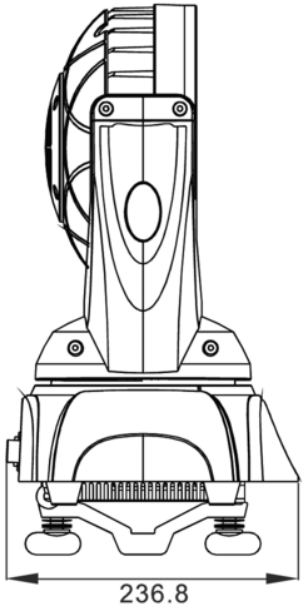
- Clean with soft cloth using normal glass cleaning fluid.
- Always dry the parts carefully.
- Clean the external optics at least every 20 days. Clean the internal optics at least every 30/60 days.

7 Technical specifications

Through its flexible installation options the unit can be installed in various orientations.
It is perfect for professional stage, theatre, TV, exhibition and architectural applications.

DMX channels	9/16 channels
Voltage	AC 100…240 V, 50/60 Hz
Power consumption	300 W
Light source:	22 × 10 W CREE quad-color LED
Fuse	5 A, slow characteristic
Beam angle	36°
Dimensions	404.8 mm × 236.8 mm × 335.3 mm (15.9 in. × 9.3 in. × 13.2 in.)
Weight	9.5 kg (20.9 lbs)


404.8
444.8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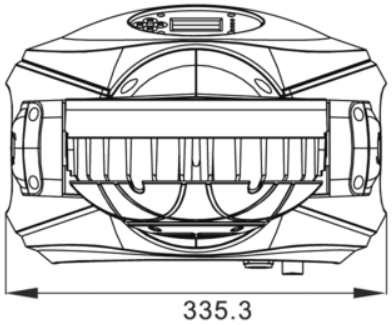
335.3

8 Protecting the environment

Disposal of the packaging material

For the transport and protective packaging, environmentally friendly materials have been chosen that can be supplied to normal recycling.

Ensure that plastic bags, packaging, etc. are properly disposed of.

Do not just dispose of these materials with your normal household waste, but make sure that they are collected for recycling. Please follow the notes and markings on the packaging.

Disposal of your old device

This product is subject to the European Waste Electrical and Electronic Equipment Directive (WEEE). Do not dispose with your normal household waste.

Dispose of this device through an approved waste disposal firm or through your local waste facility. When discarding the device, comply with the rules and regulations that apply in your country. If in doubt, consult your local waste disposal facility.